
Appendix L

Areas of Critical Environmental Concern
Evaluation Report

APPENDIX L

AREAS OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION REPORT

This appendix contains the Areas of Critical Environmental Concern Evaluation Report prepared by the BLM Nevada State Office in July 2013.

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United States Department of the Interior

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AREAS OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION REPORT

RELEVANCE AND IMPORTANCE EVALUATIONS

FOR AREAS NOMINATED AS AREAS OF CRITICAL ENVIRONMENTAL
CONCERN FOR GREATER SAGE-GROUSE AND ITS HABITAT

PREPARED BY THE NEVADA STATE OFFICE
JULY 2013

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ACRONYMS AND ABBREVIATIONS

Full Phrase

ACEC	area of critical environmental concern
BLM	United States Department of the Interior, Bureau of Land Management
CFR	Code of Federal Regulations
EIS	environmental impact statement
FLPMA	Federal Land Policy and Management Act
GIS	Geographic Information System
GRSG	Greater Sage-Grouse
NDOW	Nevada Department of Wildlife
PMU	Population Management Unit
RMP	resource management plan
ROD	record of decision
SRPA	Sub-regional Plan Amendment
US	United States
WSA	wilderness study area

AREAS OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION REPORT

I. INTRODUCTION

In December 2011, the United States (US) Department of the Interior, Bureau of Land Management (BLM) initiated the official public scoping period to prepare multiple resource management plan amendments and revisions on a sub-regional basis to address Greater Sage-Grouse (GRSG) conservation across its entire range west-wide via publication of a Notice of Intent in the *Federal Register* (FR Vol. 76, Number 237, page 77008-77011) (December 9, 2011). As part of the Notice of Intent, the public, stakeholders, and agencies were invited to nominate areas of critical environmental concern (ACECs) within the planning sub-regions.

The BLM is required under the Federal Land Policy and Management Act of 1976, as amended (FLPMA), to do land use planning under Title II. Sec. 202 (c)(3) requires the BLM to give priority to the designation and protection of ACECs as part of the land use planning process. Among various land use plan decisions to be addressed in the sub-regional plan amendments for the Great Basin Region, the BLM will address administrative designations such as ACECs.

To be designated as an ACEC, an area must meet both the relevance and importance criteria listed under 43 CFR 1610.7-2(a)(1)(2). Nominations may come from BLM staff, other agencies, or members of the public. In addition to new nominations, the BLM also evaluates any past nominations received that have not previously been considered in a planning process. Nominations that have been received that have gone through land use planning and had decisions made on them will not be re-evaluated in this effort. To date, the Nevada State Office has received a total of 82 nominations for the Northeast California-Nevada Sub-Region.

2. DEFINITION OF AN AREA OF CRITICAL ENVIRONMENTAL CONCERN

BLM regulations (43 CFR part 1601.0-5(a)) define an ACEC as an area “within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The identification of a potential ACEC shall not, of itself, change or prevent change of the management or use of public lands.”

3. CRITERIA REQUIREMENTS FOR ACEC DESIGNATION

To be designated as an ACEC, an area must meet the relevance and importance criteria listed in the regulations and require special management. As part of the sub-regional planning effort, a BLM interdisciplinary team reviewed all ACEC nominations to determine if they met the ACEC criteria to be considered proposed ACECs. The two elements of ACEC criteria are listed below.

3.1 RELEVANCE CRITERIA

Does the area contain one or more of the following:

1. A significant historic, cultural, or scenic value?
2. A fish and wildlife resource?
3. A natural process or system?
4. A natural hazard?

3.2 IMPORTANCE CRITERIA

Does the value, resource, system, process, or hazard described above have substantial significance or value? Does it meet one or more of the following:

1. Is it more than locally significant, especially compared with similar resources, systems, processes, or hazards within the region or nation?
2. Does it have qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change?
3. Has it been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA?
4. Does it have qualities that warrant highlighting to satisfy public or management concerns about safety and public welfare?
5. Does it pose a significant threat to human life and safety or property?

4. THE ACEC EVALUATION PROCESS

There are several steps in the identification and evaluation of ACECs (see **Figure 5-1**, NECA-NV Sub-regional Plan Amendment ACEC Process, page 9). These steps include nomination of areas that may meet the relevance and importance criteria, evaluation of the nominated areas, and consideration of proposed ACECs in various alternative scenarios. The effects of proposed alternatives including proposed ACECs are analyzed in the Draft Sub-regional Plan Amendment (SRPA)/Environmental Impact Statement (EIS) which is subject to a 90-day public review and comment period. After the close of the 90-day public comment period, public comments are reviewed and adjustments to the proposed SRPA and proposed ACECs are made and included in the Final SRPA/EIS. Designation of ACECs occurs in the record of decision (ROD) approving the SRPA.

4.1 IDENTIFICATION / NOMINATION

ACECs can be nominated at any time but can only be designated through land use plans. Nominations were solicited from the public during the public scoping process.

4.2 EVALUATION OF NOMINATIONS FOR RELEVANCE AND IMPORTANCE

Nominations were evaluated to determine whether they meet the relevance and importance criteria. The relevance and importance criteria are detailed in the "Evaluation Process" section of this report.

4.3 CONSIDERATION OF PROPOSED ACECS

Proposed ACECs are considered as SRPA alternatives as they are developed. Each ACEC is proposed for designation in at least one management alternative. The need for special management and the resulting effects from applying such management are assessed in the EIS. The Agency Preferred Alternative identifies which ACECs are proposed for designation.

4.4 COMMENT ON PROPOSED ACECS

A notice of any areas proposed for ACEC designation is published in the Federal Register along with a Notice of Availability of the Draft SRPA/EIS requesting public comment. Comments received on the Draft SRPA/EIS will be considered in the preparation of the Final SRPA/EIS. After a 30-day protest period, a ROD is prepared and the plan is approved along with applicable ACECs (see below designation section).

4.5 DESIGNATION

An ACEC is proposed for designation if the area requires special management. Special management is defined as management outside of standard or routine practices, and usually includes more detail than other prescriptions contained within the plan. If analysis determines that special management is required, the area is recommended for designation of an ACEC. Designation of ACECs occurs when the ROD is signed approving the SRPA.

5. ACEC EVALUATION

The BLM is responsible for evaluating a nominated area to determine if it meets the relevance/importance criteria and requires special management. The SRPA evaluation team was comprised of an interdisciplinary team composed of specialists and managers representing different resource backgrounds and agencies. The team evaluated nominations provided by the public, state agencies, and BLM staff. The evaluation considered all current nominations. The SRPA ACEC evaluation team was comprised of the following specialists:

Name	Position and Office
BLM	
Marguerite Adams	Planning and Environmental Coordinator, Nevada State Office
Brian Amme	Planning and Environmental Coordinator, Nevada State Office
Sandy Gregory	Fuels Lead, Nevada State Office
Emily Jennings	Natural Resources Supervisor, Eagle Lake Field Office
Arlene Kosic	Wildlife, Alturas Field Office
Dave Mermejo	GIS, Nevada State Office
Sue Noggles	Planning and Environmental Coordinator, Eagle Lake Field Office
Paul Podborny	Supv. RMS, Elko District Office
Doug Siple	Mining Engineer, Nevada State Office
Joe Tague	Nevada State Office
Leisa Wesch	GIS Specialist Nevada State Office
Forest Service	
David Reis	Humboldt-Toiyabe National Forest
Contractors	
Holly Prohaska	Project Manager, Environmental Management and Planning Solutions, Inc.
Marcia Rickey	GIS, Environmental Management and Planning Solutions, Inc.
Paul Roush	Contractor, Nevada State Office
Randy Sharp	Contractor, Forest Service

The evaluation team analyzed 82 nominations for ACECs (see **Figure 6-1**, Nominated Areas of Critical Environmental Concern).

Two nomination evaluation meetings were held. The first meeting was held on May 16, 2012, at the Nevada State Office. The second meeting was held August 15 and 16, 2012, at the Nevada State Office. All nominations were reviewed in each meeting. The first meeting was held to determine if relevance and importance criteria were met. The second meeting was held to develop a spatial component to where these relevant and important values were believed to exist within the state regardless of land ownership. The evaluation process was conducted through the use of geographic information systems (GIS) tools projected on a screen for the team to review. All the ACEC nominations received were encompassed within Nevada Department of Wildlife (NDOW) Population Management Units (PMUs). Each PMU has been mapped by NDOW into five habitat categories (March 2012).

For interim management and planning purposes, in March 2012 the BLM adopted the NDOW Categories 1 and 2 to as preliminary priority habitat (PPH), the most important and irreplaceable habitat for GRSG. The BLM used NDOW Category 3 to represent preliminary general habitat (PGH).

The ACEC interdisciplinary team agreed that relevance criterion 2, a fish or wildlife resource is present was met for the GRSG. In general, habitat that was considered NDOW Category 1 and 2 were considered to meet importance criterion 2 that it does have qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change. In addition, on a more regional basis, importance criterion 1 is also met for areas considered to be important strongholds for the species. No other relevance or importance criteria were deemed to be met.

The analyses of the ACEC criteria as identified in BLM Manual 1613.1 Characteristics of ACECs are summarized below:

5.1 RELEVANCE CRITERIA

An area meets the “relevance” criterion if it contains one or more of the following:

1. A significant historic, cultural, or scenic value (including but not limited to rare or sensitive archeological resources and religious or cultural resources important to Native Americans).

No. Although historic, cultural and scenic values occur widespread on public lands, the nominations did not highlight any such values as part of the nomination for GRSG habitat. A general reference to the presence of various resource values without specifying why the values are significant in the context of an ACEC does not provide rationale for meeting this criterion.

2. A fish and wildlife resource (including but not limited to endangered, sensitive, or threatened species, or habitat essential for maintaining species diversity).

Yes. The sensitive wildlife resource and essential habitat for GRSG is present within the areas nominated as ACECs.

3. A natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relic plants or plant communities which are terrestrial, aquatic, or riparian; or rare geological features)

No. Although natural systems and processes occur on public lands, the sagebrush vegetation community and the various habitat requirements of GRSG across its range are not comprised of plant

species or communities as described in this criterion and were not highlighted as comprising a natural system.

4. A natural hazard (including but not limited to areas of avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or dangerous cliffs). A hazard caused by human action may meet the relevance criteria if it is determined through the resource management planning process that it has become part of the natural process?

No. The public lands nominated as ACECs do not constitute a natural hazard as described in this criterion.

5.2 IMPORTANCE CRITERIA

The value, resource, system, process, or hazard described above has substantial significance or value in order to satisfy the “importance” criteria. This generally means that the value, resource, system, process, or hazard is characterized by one or more of the following:

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource.

Yes. Although concerns are based on a broad range of threats that vary in scope and intensity across the range of the species regarding habitat fragmentation and disturbances, there are recognized “strongholds” for GRSG habitat and populations that exhibit on a regional or range-wide basis, composition and integrity of habitat and condition as well as strength of populations that are sustainable over the long-term. These qualities give these areas a sense of special worth and cause for concern.

2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.

Yes. The areas nominated as ACECs have the following qualities described under this criterion: fragile, sensitive, irreplaceable, and vulnerable to adverse change. The resource on a range-wide basis is not rare, exemplary, unique, or endangered or threatened (i.e. listed species).

3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA.

No. Although conservation of GRSG is of current national concern to the agency due to the warranted but precluded status in regard

to listing by the United States Fish and Wildlife Service, and initiation of the GRSG planning strategy, the agency has been emphasizing GRSG conservation since the late 1990s. In 2005, the BLM issued WO-IM-2005-024 directing that GRSG conservation measures be included in all resource management plans within the range of the species by 2015. At the time, there existed no secretarial or executive orders or public laws identifying GRSG as a national priority for protection beyond management of the species habitat which falls within the purview of implementation of the Endangered Species Act and FLPMA.

4. Has qualities that warrant highlighting to satisfy public or management concerns about safety and public welfare.

No. Qualities regarding safety and public welfare are not present within the areas nominated as ACECs for GRSG habitat.

5. Poses a significant threat to human life and safety or to property.

No. Areas nominated as ACECs for GRSG habitat do not pose a significant threat to human life and safety or to property.

The interdisciplinary team then reviewed each nominated ACEC by NDOW PMU across Nevada for presence or absence of GRSG habitat. The evaluation was conducted by PMU rather than by exact nominated ACEC because there were several overlapping nominations with various boundaries. Several factors were considered in determining if an area met the relevance and importance criteria. The non-exhaustive list of factors includes but is not limited to:

- Category 1 and 2 habitat (BLM PPH)
- Potential for connectivity habitat
- Presence/absence of active leks (2007 – 2010 data)
- # of birds counted on leks (2007 – 2010 data)
- Local telemetry data
- Land tenure (inholdings)
- Nesting habitat
- Core breeding habitat
- Local migratory characteristics
- Fire history
- Degraded/transitional habitat
- Artificial habitat (agriculture)
- Degraded habitat through urban and urban interface influences

The team found there were large acreages within PMUs that did not contain Category 1 or 2 habitat and some PMUs had no record of being occupied by GRSG or active leks. For each PMU identified to contain at least Category 1 habitat, the above factors were considered and documented in a matrix table that identified the PMU, the ACEC nominator, the criteria met, and threats to the habitat. See **Table 5-1**, Proposed Areas of Critical Environmental Concern within Population Management Units, and **Figures 6-2 and 6-3**, Alternative C: Areas of Critical Environmental Concern and Alternative F: Areas of Critical Environmental Concern for a summary of areas evaluated and determined to meet relevance and importance criteria. These areas will be carried forward for analysis in the SRPA/EIS. Details can be found in **Table 6-1**, Population Management Units Evaluated for Relevance and Importance. Also see **Figure 6-1**, Nominated Areas of Critical Environmental Concern.

**Table 5-1
Proposed Areas of Critical Environmental Concern**

Proposed ACEC	Acres¹	Proposed ACEC	Acres¹
<i>Alternative C²</i>		<i>Alternative C²</i>	
Black Rock	132,400	O'Neil Basin	665,600
Buffalo/Skedaddle	1,033,000	Pine Forest	46,700
Butte/Buck/White Pine	1,031,000	Reese River	351,400
Clan Alpine	70,900	Ruby Valley	292,000
Cortez	127,300	Santa Rosa	601,600
Desatoya	170,800	Schell/Antelope	296,000
Desert	557,100	Shoshone	239,100
East Valley	160,300	Snake	319,700
Fish Creek	50,600	South Fork	223,500
Gollaher	597,700	Spring/Snake Valley	130,500
Islands	112,600	Steptoe/Cave	184,500
Lincoln	280,200	Three Bar	417,500
Lone Willow	298,300	Toiyabe	640,900
Massacre	987,700	Tuscarora	442,000
Monitor	582,300	Virginia	53,500
North Fork	827,900	Vya	324,500
<i>Alternative F³</i>		<i>Alternative F³</i>	
Bates Mountain	384,200	Monitor Valley	253,300
Cortez Range	164,800	Reese River	109,600
Fish Creek Mountains	70,100	Roberts Mountain	100,900
Little Fish Lake Valley	122,700	Telegraph Mountain	14,100
Monitor	564,700		

¹Acres include National Forest System lands where the proposed ACEC overlaps National Forest System lands

²Proposed ACECs for Alternative C were nominated and evaluated by PMU

³Proposed ACECs for Alternative F were individual nominations (i.e., not PMU nominations) although they were evaluated when the PMU was evaluated (Alternative C)

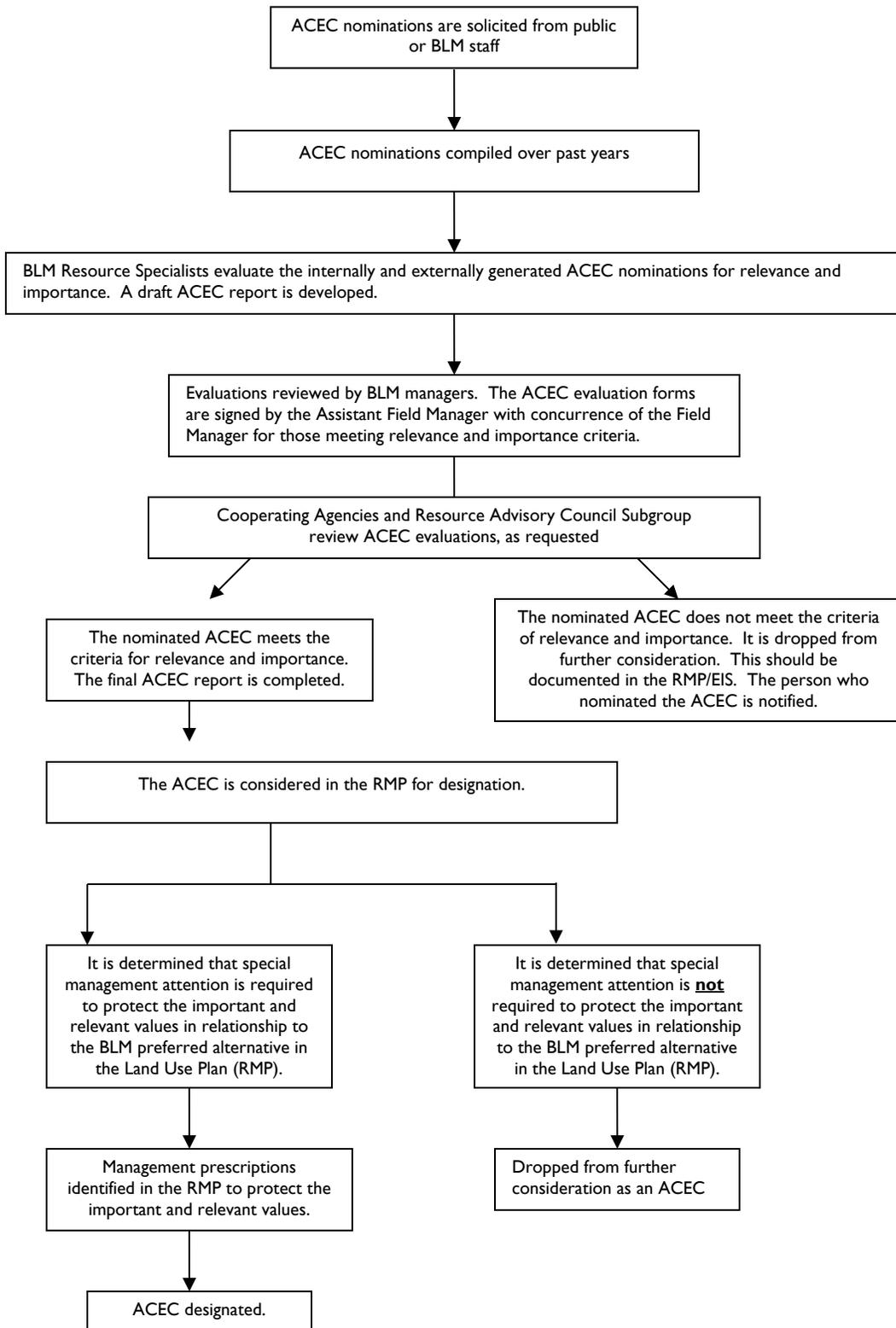


Figure 5-1 Northeast California-Nevada Sub-regional Plan Amendment ACEC Process

6. RELEVANCE AND IMPORTANCE EVALUATION OF ACEC NOMINATIONS

Table 6-1, Nominated ACECs Carried Forward for Analysis, lists the ACECs that were evaluated and found to meet the relevance and importance criteria. All ACECs were assessed for GRSG population and habitat values, and it was determined that all ACECs met relevance criteria #2 (unique population) and importance criteria #2 (irreplaceable habitat). Note that acres in this table represent the full PMU(s). All ACECs were assessed for GRSG population and habitat values.

In some cases, a portion of the PMU or PMUs were not carried forward for analysis in the alternatives because it was determined that the area did not meet the relevant and importance criteria. Rationale is provided in the table.

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
Battle Mountain	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Black Rock	Vya Sheldon Massacre Buffalo-Skedaddle Black Rock Pine Forest	WWP	2,147,742	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Wild Horse Population over AML; Infrastructure	High	Includes large areas of Category 1 and 2 habitats and some Category 3. The Sheldon area is outside BLM and Forest Service administration.
Bodie Hills	Bi-State	WWP	4,527,963				Outside of planning area
Buffalo-Skedaddle	Unit 1 Horse Lake Tunnison	Eagle Lake Field Office	72,770	Yes	Infrastructure/ROW; Conifer Encroachment; Wildfire; Invasive Species	High	25 percent Overlap into Tunnison Wilderness Study Area (WSA); Adjacent to Eagle Lake Basin ACEC
	Unit 1A Horse Lake Tunnison	Eagle Lake Field Office	12,462	Yes	Infrastructure/ROW; Conifer Encroachment; Wildfire; Invasive Species	High	25 percent Overlap into Tunnison WSA; Adjacent to Eagle Lake Basin ACEC
	Unit 2 Chalk Bluff/Shaffer	Eagle Lake Field Office	52,603	Yes	Wildfire; Invasive Species; Agriculture	High	Leks on private lands high priority for acquisition. Deep Creek high priority for restoration.
	Unit 2A Chalk Bluff/Shaffer	Eagle Lake Field Office	32,409	Yes	Wildfire; Invasive Species; Agriculture	High	Leks on private lands high priority for acquisition. Deep Creek high priority for restoration.

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
	Unit 3 Shinn/Rush Creek	Eagle Lake Field Office	87,103	Yes	Wildfire; Infrastructure/ROW; Grazing/Wild Horse Population over AML; Infrastructure	High	30 percent in Five Springs WSA; Spring sites on private land high priority for BLM acquisition.
	Unit 4 Dry Valley/Skedaddle	Eagle Lake Field Office	98,621	Yes	Wildfire; Invasive Species; Grazing/Livestock and Wild Horses	Medium	90 percent in Skedaddle and Dry Valley Rim WSAs; Very high density of GRSG.
	Vya Sheldon Massacre Buffalo-Skedaddle Black Rock Pine Forest	WWP	2,147,742	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Wild Horse Population over AML; Infrastructure	High	Includes large areas of Category 1 and 2 habitats and some Category 3. The Sheldon area is outside BLM and Forest Service administration.
Butte/Buck/White Pine	Butte/Buck/White Pine	WWP	2,815,873	Yes	Hard Rock mining; Infrastructure; Grazing/Wild Horse Population over AML; Conifer Encroachment	High	Correlates with the NDOW Telegraph Mountain nomination. Large areas of the PMU do not contain relevance and importance values or essential importance habitat. NDOW Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.
	Telegraph Mountain	NDOW	19,769	Yes	Hard Rock mining; Infrastructure; Grazing/Wild Horse Population over AML; Conifer Encroachment	High	Correlates with the WWP Butte/Buck/ White Pine nomination. Large areas of the PMU do not contain relevance and importance values or essential importance habitat. NDOW

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator ¹	Proposed Acres	Meets Relevance and Importance?	Major Threats ²	Vulnerability to Change	Comments
							Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.
Clan Alpine	Stillwater, Clan Alpine, Desatoya	WWP	1,258,067	Yes	Conifer Encroachment; Wildfire; Grazing; Invasive Species	High	Indicates occupied habitat and the potential to enhance habitat and reduce fragmentation.
Cortez	Shoshone, Cortez, Three Bar, Diamond	WWP	2,895,660	Yes	Hard Rock Mining; Wildfire; Grazing; Invasive Species.	High	South end of PMU only; nomination aligns with the NDOW Cortez nomination.
	Cortez Range	NDOW	161,100	Yes	Hard Rock Mining; Wildfire; Grazing; Invasive Species.	High	Nomination closely aligns with South end of WWP Cortez nomination.
Desatoya	Stillwater, Clan Alpine, Desatoya	WWP	1,258,067	Yes	Conifer Encroachment; Wildfire; Grazing; Invasive Species	High	Indicates occupied habitat and the potential to enhance habitat and reduce fragmentation.
Desert	Santa Rosa, Desert, Eden Valley	WWP	2,142,580	Yes	Wildfire; Invasive Species	High	Includes Categories 1, 2, and 3 that need to be analyzed to identify potential corridors to reduce habitat fragmentation. Eden Valley PMU does not meet Relevance or Importance
Desert Creek/Flaes	Bi-State	WWP	4,527,963				Outside of planning area.
Diamond	Shoshone, Cortez, Three Bar, Diamond	WWP	2,895,660	No			Doesn't meet relevance and importance on its own. Habitat is tied more to the Butte/Buck and Bald area.

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
East Range	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
East Valley	East Valley, Schell-Antelope	WWP	2,827,390	Yes	Conifer Invasion; Infrastructure; Grazing/Wild Horse Population over AML	High	Large areas of the PMU do not contain relevance and importance values or essential importance habitat. NDOW Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.
Eden Valley	Santa Rosa, Desert, Eden Valley	WWP	2,142,580	Yes	Wildfire; Invasive Species;	High	Includes Categories 1, 2, and 3 that need to be analyzed to identify potential corridors to reduce habitat fragmentation. Eden Valley PMU does not meet Relevance or Importance
Eugenes	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
Fish Creek	Limbo Nightingale, and 9 Others	WWP	1,323,776	Yes	Fire; Conifer Encroachment; Invasive Species	High	Correlates with NDOW Fish Creek Mountain nomination. Contains some viable habitat that should be analyzed to identify potential habitat protection.
	Fish Creek Mountains	NDOW	68,181	Yes	Fire; Conifer Encroachment; Invasive Species	High	NDOW Fish Creek Mountain nomination correlates with the WWP Limbo, Nightingale and 9 Others nomination: Fish Creek - Contains some viable habitat that should be analyzed to identify potential habitat protection.
Gollaher	Gollaher, Snake	WWP	1,482,827	Yes	Wildfire; Invasive Species; Infrastructure; Grazing	High	Includes mostly categories 1 and 2 with small inclusion of Category 3. May need to be analyzed to identify potential corridors to reduce habitat fragmentation.
Humboldt	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Islands	Islands, O'Neil Basin	WWP	1,284,839	Yes	Wildfire; Invasive Species; Grazing; Infrastructure		Includes mostly categories 1 and 2 with small inclusion of Category 3. May need to be analyzed to identify potential

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
							corridors to reduce habitat fragmentation.
Kawich	Kawich	WWP	267,107	No			Lacks Habitat and population
Limbo	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Lincoln	Steptoe-Cave, Lincoln, Spring-Snake Valley	WWP	3,371,534	Yes	Conifer Invasion; Infrastructure; Grazing/Wild Horse Population over AML; Wildfire	High	Large areas of the PMU do not contain relevance and importance values or essential importance habitat. NDOW Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.
Lone Willow	Lone Willow	WWP	480,121	Yes	Wildfire; Invasive Species; Grazing	High	Includes mostly categories 1 and 2 with small inclusion of Category 3 within Category 2. May need to be analyzed to identify potential corridors to reduce habitat fragmentation.
Majuba I	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
							infrastructure area that is frequently affected by wildfire.
Majuba 2	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Majuba 3	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Majuba 4	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Majuba 5	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator ¹	Proposed Acres	Meets Relevance and Importance?	Major Threats ²	Vulnerability to Change	Comments
							administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Massacre	Vya Sheldon Massacre Buffalo-Skedaddle Black Rock Pine Forest	WWP	2,147,742	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Wild Horse Population over AML; Infrastructure	High	Includes large areas of Category 1 and 2 habitats and some Category 3. The Sheldon area is outside BLM and Forest Service administration.
	Wall Canyon	Surprise Field Office	199,251	Yes	Wildfire; Infrastructure; Invasive Species; Grazing	Medium	High density of GRSG.
Monitor	Toiyabe, Reese River, Monitor	WWP	5,699,520	Yes	Conifer Encroachment; Grazing	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.
	Monitor Valley	NDOW	247,007	Yes	Conifer Encroachment; Grazing	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator ¹	Proposed Acres	Meets Relevance and Importance?	Major Threats ²	Vulnerability to Change	Comments
							nominations contain the most scientific information and relevance.
	Monitor	CBD	550,682	Yes	Conifer Encroachment; Grazing	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.
	Little Fish Lake Valley	NDOW	57,039	Yes	Conifer Encroachment; Grazing	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.
Mount Grant	Bi-State	WWP	4,527,963				Outside of planning area
Nightingale	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
							wildfire.
North Fork	Tuscarora, North Fork	WWP	3,220,492	Yes	Wildfire; Invasive Species; Grazing; Infrastructure; Hard Rock Mining	High	Includes Categories 1, 2, and 3 that need to be analyzed to identify potential corridors to reduce habitat fragmentation.
O'Neil Basin	Islands, O'Neil Basin	WWP	1,284,839	Yes	Wildfire; Invasive Species; Grazing; Infrastructure	High	Includes mostly categories 1 and 2 with small inclusion of Category 3. May need to be analyzed to identify potential corridors to reduce habitat fragmentation.
Pahrah	Virginia-Pahrah	WWP	356,213	No			Does not meet the relevance or importance. It is affected by human development, wildfire, and poor habitat conditions. Issues were discussed by the State Local PMU Working Group.
Pine Forest	Vya Sheldon Massacre Buffalo-Skedaddle Black Rock Pine Forest	WWP	2,147,742	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Wild Horse Population over AML; Infrastructure	High	Includes large areas of Category 1 and 2 habitats and some Category 3. The Sheldon area is outside BLM and Forest Service administration.
Pine Nut	Bi-State	WWP	4,527,963				Outside of planning area
Quinn	Quinn	WWP	1,985,719	No			Although there are 5 leks, NDOW has determined that the habitat is unoccupied. Marginal Habitat is unoccupied, Status of the Leks is unknown

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
Reese River	Reese River	NDOW	92,009	Yes	Infrastructure; Conifer Encroachment	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.
	Toiyabe, Reese River, Monitor	WWP	5,699,520	Yes	Infrastructure; Conifer Encroachment	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.
Ruby Valley	South Fork, Ruby Valley	WWP	2,783,681	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Mule deer; Human Uses	High	PMU supports a significant population of birds in limited habitat.
Ruby Valley; Butte/Buck/ White Pine; East Valley	Spruce Mountain	Elko District Office	420,210				Deferred due to on-going plan amendment in the area for Wild Horse Sanctuary.
Sahwave I	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
							fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Sahwave 2	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Santa Rosa	Santa Rosa, Desert, Eden Valley	WWP	2,142,580	Yes	Wildfire; Invasive Species	High	Includes Categories 1, 2, and 3 that need to be analyzed to identify potential corridors to reduce habitat fragmentation. Eden Valley PMU does not meet Relevance or Importance
Schell/ Antelope	East Valley, Schell-Antelope	WWP	2,827,390	Yes	Conifer Invasion; Infrastructure; Grazing/Wild Horse Population over AML	High	Large areas of the PMU do not contain relevance or importance values or essential importance habitat. NDOW Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.
Sheldon	Vya Sheldon Massacre Buffalo-	WWP	2,147,742	Yes	Wildfire; Conifer Encroachment; Invasive Species;	High	Includes large areas of Category 1 and 2 habitats and some Category 3. The

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
	Skedaddle Black Rock Pine Forest				Grazing/Wild Horse Population over AML; Infrastructure		Sheldon area is outside BLM and Forest Service administration.
Shoshone	Shoshone, Cortez, Three Bar, Diamond	WWP	2,895,660	Yes	Grazing; Conifer Encroachment; Wildfire	High	Category 1 habitat and contains numerous active leks. Northern portion includes fragmented checkerboard, Southern portion is intact with active leks.
Snake	Gollaher, Snake	WWP	1,482,827	Yes	Wildfire; Invasive Species; Infrastructure; Grazing	High	Includes mostly categories 1 and 2 with small inclusion of Category 3. May need to be analyzed to identify potential corridors to reduce habitat fragmentation.
Sonoma	Limbo, Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
South Fork	South Fork, Ruby Valley	WWP	2,783,681	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Mule deer; Human Uses	High	Correlates with Elko District Pinion Range nomination. Large portions of the PMU do not contain values outside of NDOW Category 1. There is habitat fragmentation with potential in the checkerboard area that can be further analyzed

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator ¹	Proposed Acres	Meets Relevance and Importance?	Major Threats ²	Vulnerability to Change	Comments
	Pinon Range	Elko District Office	171,158	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Mule deer	High	to conserve habitat. Competition with mule deer. Correlates with WWP South Fork/Ruby Valley nomination. Large portions of the PMUs do not contain values outside of NDOW Category 1. There is habitat fragmentation with potential in the checkerboard area that can be further analyzed to conserve habitat. Competition with mule deer.
South Mono	Bi-State	WWP	4,527,963				Outside of planning area.
Spring/Snake Valley	Step toe-Cave, Lincoln, Spring-Snake Valley	WWP	3,371,534	Yes	Conifer Invasion; Infrastructure; Grazing/Wild Horse Population over AML; Wildfire	High	Large areas of the PMU do not contain relevance or importance values or essential importance habitat. NDOW Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.
Step toe/Cave	Step toe-Cave, Lincoln, Spring-Snake Valley	WWP	3,371,534	Yes	Conifer Invasion; Infrastructure; Grazing/Wild Horse Population over AML; Wildfire	High	Large areas of the PMU do not contain relevance or importance values or essential importance habitat. NDOW Category 1 and 2 seem to capture the irreplaceable and important habitat covered by the active leks.

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
Stillwater	Stillwater, Clan Alpine, Desatoya	WWP	1,258,067	No			No documented occupation of available habitat.
Three Bar	Roberts Mountain*	NDOW	98,617	Yes	Conifer Encroachment; Hard Rock Mining; Grazing; Wildfire	High	Correlates with WWP Three Bars nomination. Continuity of habitat, potential for population.
	Shoshone, Cortez, Three Bar, Diamond	WWP	2,895,660	Yes	Conifer Encroachment; Hard Rock Mining; Grazing; Wildfire	High	Correlates with NDOW Roberts Mountain nomination. Continuity of habitat, potential for population.
Toiyabe	Bates Mountain*	NDOW	340,983	Yes	Conifer Encroachment; wildfire; Invasive Species; Grazing; Infrastructure	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.
	Toiyabe, Reese River, Monitor	WWP	5,699,520	Yes	Conifer Encroachment; wildfire; Invasive Species; Grazing; Infrastructure	High	Correlation between WWP, CBD, and NDOW nominations. One of the largest unfragmented habitat areas; includes important cultural resources and important habitat for other species. NDOW's nominations contain the most scientific information and relevance.

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
Trinity 1	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Trinity 2	Limbo Nightingale, and 9 Others	WWP	1,323,776	No			Shows lack of habitat and population. Is in the middle of checkerboard with fragmented surface administration and old mining areas and infrastructure area that is frequently affected by wildfire.
Tuscarora	Tuscarora, North Fork	WWP	3,220,492	Yes	Wildfire; Invasive Species; Grazing; Infrastructure; Hard Rock Mining	High	Includes Categories 1, 2, and 3 that need to be analyzed to identify potential corridors to reduce habitat fragmentation.
	Willow Creek Ridge*	Elko District Office	28,800	Yes	Wildfire; Invasive Species; Grazing; Infrastructure; Hard Rock Mining	High	Correlates with WWP Tuscarora/North Fork nomination. Includes Categories 1, 2, and 3 that need to be analyzed to identify potential corridors to reduce habitat fragmentation.
Virginia	Virginia-Pahrah	WWP	356,213	Yes	Wildfire; Conifer; Invasive Species; Infrastructure;	High	The Virginia Range may be viable for assessment and analyzed further. Issues were

**Table 6-1
Population Management Units Evaluated for Relevance and Importance**

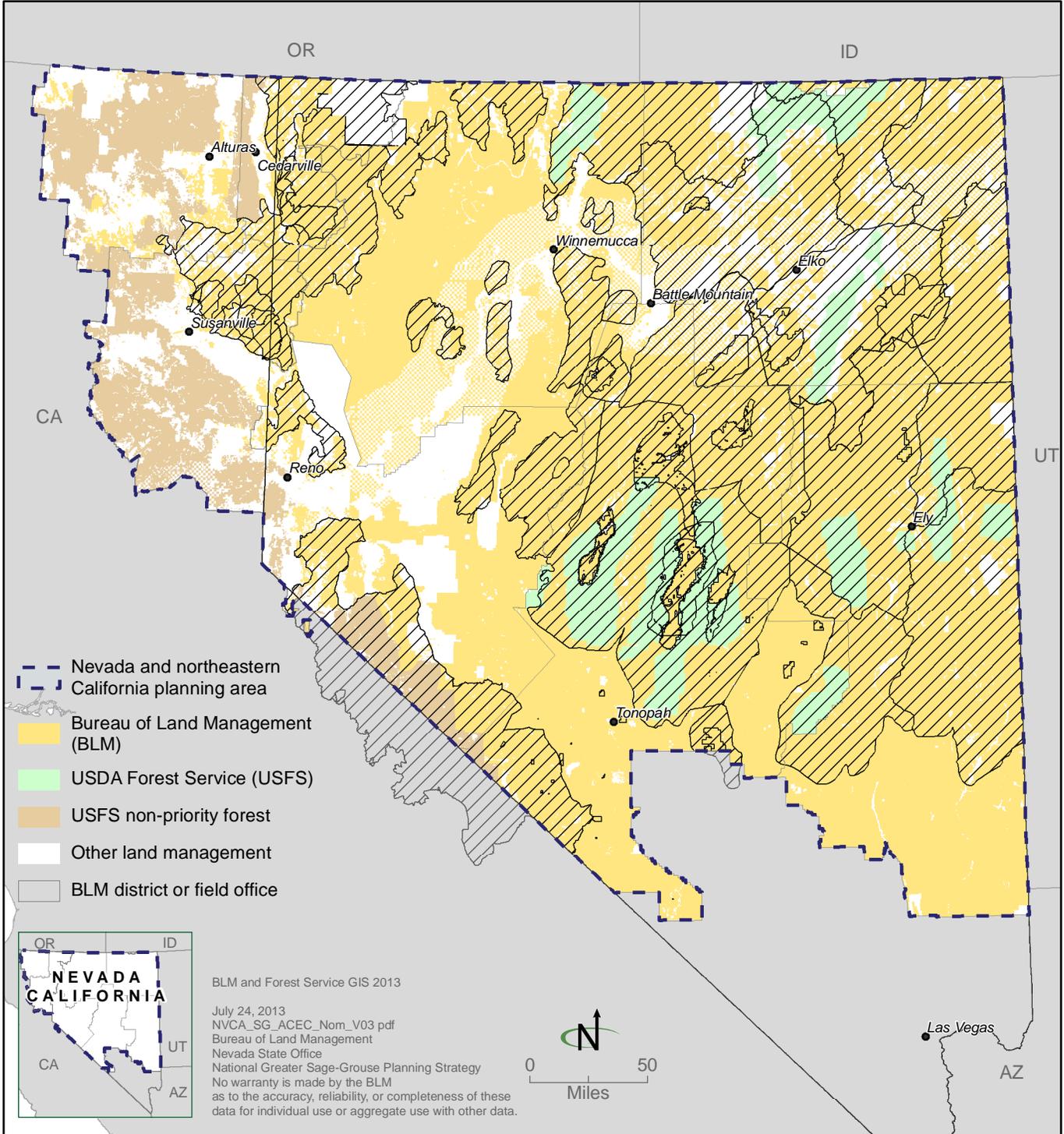
PMU Name	Proposed ACEC Name	Nominator¹	Proposed Acres	Meets Relevance and Importance?	Major Threats²	Vulnerability to Change	Comments
					Geothermal; Urbanization		discussed by the State Local PMU Working Group.
Vya	Vya Sheldon Massacre Buffalo- Skedaddle Black Rock Pine Forest	WWP	2,147,742	Yes	Wildfire; Conifer Encroachment; Invasive Species; Grazing/Wild Horse Population over AML; Infrastructure	High	Includes large areas of Category 1 and 2 habitats and some Category 3. The Sheldon area is outside BLM and Forest Service administration.
White Mountains	Bi-State	WWP	4,527,963				Outside of planning area



Nominated Areas of Critical Environmental Concern



Areas of Critical Environmental Concern (ACECs) were nominated by Nevada Division of Wildlife, Western Watersheds Project, Center for Biological Diversity, BLM Eagle Lake Field Office, BLM Surprise Field Office, and BLM Elko District Office.



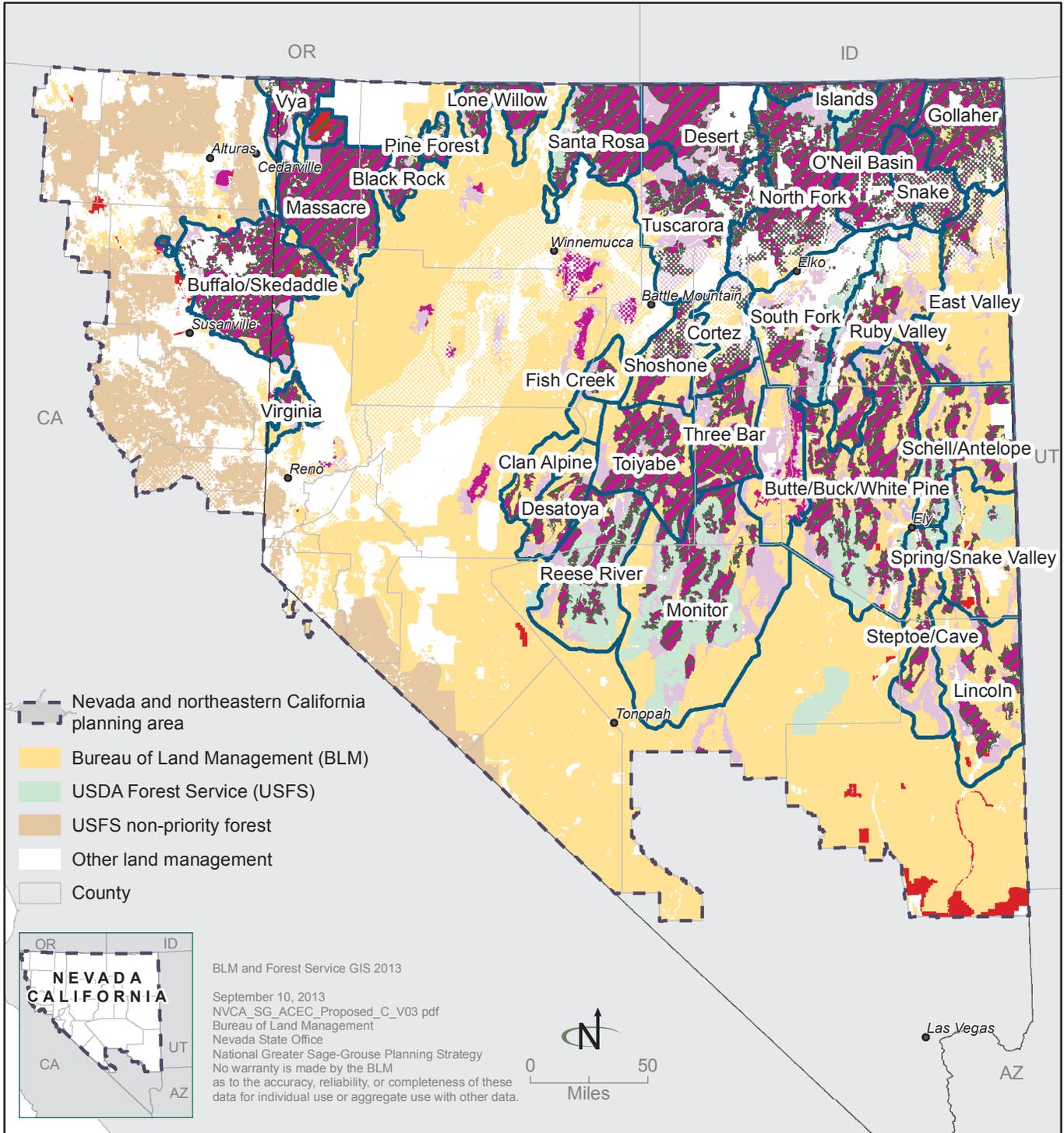
▨ Nominated ACEC



Alternative C: Areas of Critical Environmental Concern



Action C-SD 1: Designate proposed ACEC's to preserve, protect, conserve, restore, and sustain GRSG populations and the sagebrush ecosystem on which the GRSG relies.



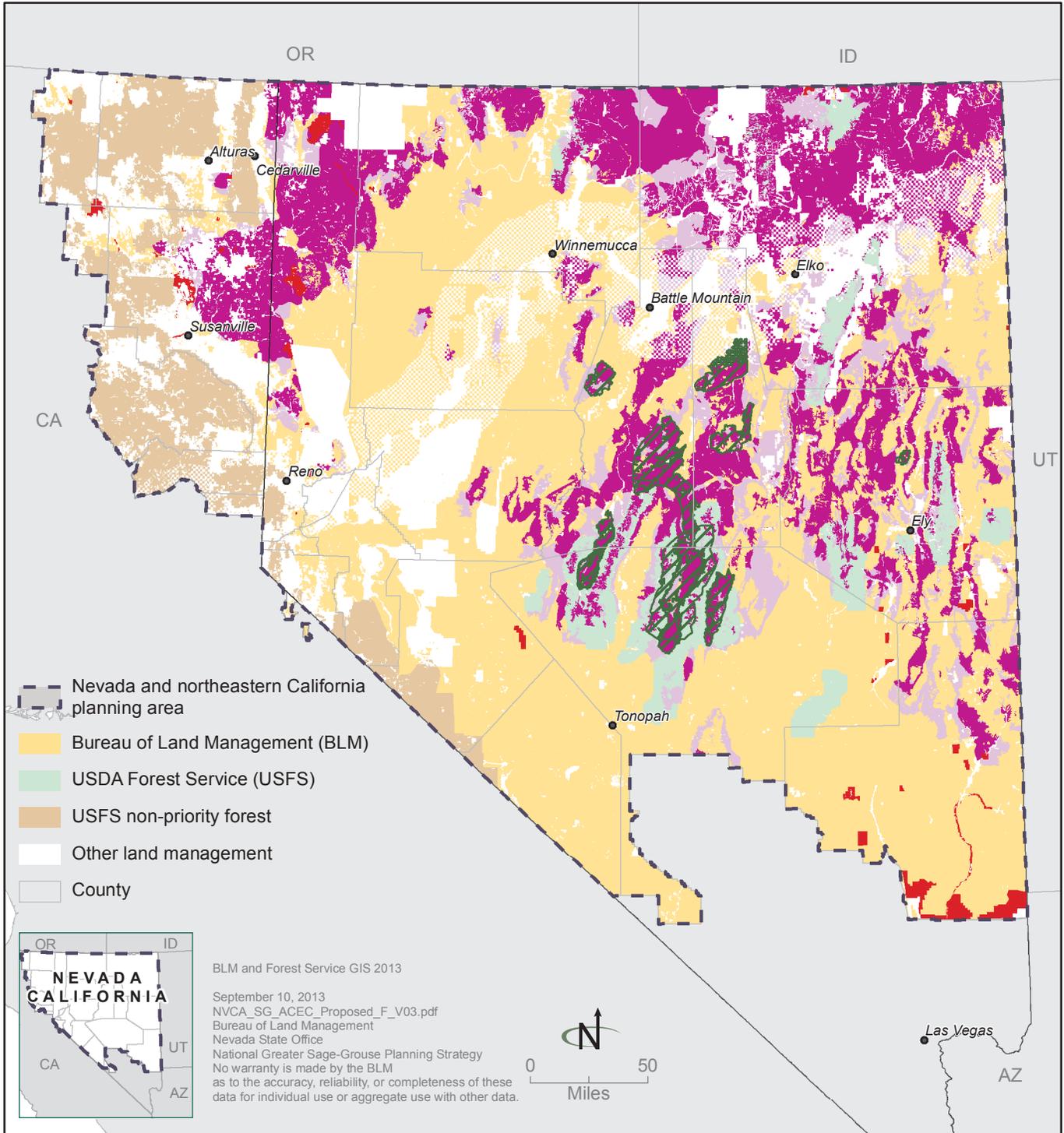
- | | |
|--|---------------------------------------|
| Existing Area of Critical Environmental Concern (ACEC) | Existing Preliminary Priority Habitat |
| Proposed ACEC | Existing Preliminary General Habitat |
| | Population management unit with PPMA |



Alternative F: Areas of Critical Environmental Concern



Action F-SD 1: Designate proposed ACEC's (BLM) and Special Conservation Areas (Forest Service) as sagebrush reserves to conserve GRSG and other sagebrush-dependent species.



- Existing Area of Critical Environmental Concern (ACEC)
- Proposed ACEC
- Existing Preliminary Priority Habitat
- Existing Preliminary General Habitat